DOCUMENT RESUME

ED 162 278 CS 004 482

AUTHOR Amorcso, Henry Carmelc, Jr.
TITLE A Psycholinguistic Analysis of the Cral and Silent Reading Performance of Selected Standard IV Subjects in Trinidad and Tobagc, West Indies. Technical Report No. 468.
INSTITUTION Wisccnsin Univ., Madiscn. Research and Development Center for Individualized Schocling.
SPONS AGENCY National Inst. of Educatien (DHEW), Washington, D.C.
PUB DATE Sep 78
CONTRACT NIE-G-78-0217
NOTE 149p.

EDRS PRICE MF-$0.83 HC-$7.35 Plus Postage.
DESCRIPTORS Doctoral Theses; Elementary Educatien; Foreign Countries; *Nonstandard Dialects; *Oral Reading; *Psycholinguistics; Reading Ability; Reading Comprehension; *Reading Difficulty; *Reading Research; Reading Skills; *Silent Reading

ABSTRACT

Students frcm Trinidad and Tcbago, West Indies, participated in a study to determine their cverall reading ability as measured by norm- and criterion-referenced reading tests and to discover the extent to which linguistically related reading difficulties were manifested in their cral and silent reading performance. The Gates-MacGinitie Reading Test and four subtests of the Wisconsin Tests of Reading Skill Develcpment: Word Attack were administered to 200 good and poor readers in their fifth year of formal education. Approximately half of the test bocklets were randomly selected and scored and the subjects were divided into good, deficit, and difference reading ability groups. Subjects frcm each group were asked to read a test passage into a tape recorder and then to retell it in their own words. Five tapings frcm each group were selected for miscue analysis. Conclusions drawn frcm the data are: no group of readers was observed to make highly effective use of oral or silent reading strategies as a means of facilitating meaning acquisition; regardless of reading ability, subjects encountered difficulties in consistently maintaining the grammatical and meaning structures of materials written in standard English; and few subjects were able to adequately verbalize about the stcries they read. (Author/FL)

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Technical Report No. 468

A PSYCHOLINGUISTIC ANALYSIS OF THE ORAL AND SILENT READING PERFORMANCE OF SELECTED STANDARD IV SUBJECTS IN TRINIDAD AND TOBAGO, WEST INDIES

by

Henry Carmelo Amoroso, Jr.

Report from the Project on
Studies in Language: Reading and Communication

Wayne Otto
Faculty Associate

CS004482

Wisconsin Research and Development
Center for Individualized Schooling
The University of Wisconsin
Madison, Wisconsin

September 1978

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This Technical Report is a doctoral dissertation reporting research supported by the Wisconsin Research and Development Center for Individualized Schooling. Since it has been approved by a University Examining Committee, it has not been reviewed by the Center. It is published by the Center as a record of some of the Center's activities and as a service to the student. The bound original is in the University of Wisconsin Memorial Library.

The project presented or reported herein was performed pursuant to a grant from the National Institute of Education, Department of Health, Education, and Welfare. However, the opinions expressed herein do not necessarily reflect the position or policy of the National Institute of Education, and no official endorsement by the National Institute of Education should be inferred.

Center Contract No. OB-NIE-G-78-0217

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The Wisconsin Research and Development Center is supported with funds from the National Institute of Education and the University of Wisconsin.

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Acknowledgments

The completion of this dissertation required the cooperation of many individuals. Of greatest significance perhaps has been the generous contribution of my major professor and friend Dr. Wayne Otto who found time from his numerous pursuits to nudge, push, and otherwise guide me through my doctoral program.

A special note of thanks is also due to Dr. Robert Davidson--a consummate educator--for his advice and counsel during my graduate program at Wisconsin.

Thanks too are due to Drs. Fredric Cassidy, Dale Johnson, Kenneth Dulin and Richard Smith for their contributions during the planning stages of the study.

My graditude is also extended to Drs. Carl Personke, Jack Kean and Richard Rodsmiller for graciously serving on my orals committee.

I am also indebted to my friends and colleagues at Wisconsin for their moral support and encouragement. A special thank you is extended to Kathy Stallard, Sandy White, Donna Scheicher and Kay Schultz for their good cheers and incessant optimism.

Thanks too are in order for the financial support provided by the Wisconsin Research and Development Center for Cognitive Learning.

My appreciation is extended to Mrs. Evelyn Williams, former principal of the Charles H. Emmanuel School, St. Croix, U.S. Virgin Islands for fostering my interests in reading education. A special note of appreciation is also extended to the outstanding educators

on St. Croix including Mrs. Winifred Ellis, Mr. Clifton Buddy, and Mr. Clifford Christian.

I am extremely indebted to the officials in the Ministry of Education and Culture, Trinidad and Tobago for permission to conduct this study. I am especially grateful to Mrs. Cleo DeGovia and Mr. Peter Girwar for their wholehearted support and cooperation during my stay in Trinidad. Thanks too are in order for the principals, teachers and children who participated in the study.

Without question I am indebted to "tanti" Lena and all other friends and relatives of "Ma's" family for making my stay in Trinidad an unforgetable experience.

Like others before me I owe a special thanks to my parents for their prayers and sacrifices. Thanks too are also extended to my mother and father-in-law for their valued confidence.

And finally to my wife Marilyn and sons Perry John and Justin Phillipe, my deepest love and appreciation. You have endured much in order that I might succeed. Through your untiring devotion you have been able to tolerate many fatherless evenings and weekends. Without your assistance--moral, financial, and typing--the completion of this study would not have been possible.

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Abstract

The purpose of this study was to describe and analyze the oral and silent reading performance of selected students in Trinidad and Tobago, West Indies. Specifically, this study sought to answer two questions. First, what is the overall reading ability of selected Standard IV students as measured by norm- and criterion-referenced reading tests? Second, what is the extent to which linguistically-related reading difficulties are manifested by selected Standard IV students in their oral and silent reading performance?

The Gates-MacGinitie Reading Test and four subtests of the Wisconsin Tests of Reading Skill Development--Word Attack were administered to two hundred good and poor readers in four districts of Trinidad. Approximately one half of the test booklets were randomly selected and handscored on the island. Subjects were divided into reading ability groups--good, deficit, and difference--according to their performance on the Vocabulary and Comprehension subtests. Randomly selected subjects from each group were asked to orally read a test passage and retell it in their own words. Five tapings from each group were selected for miscue analysis. Group mean percentages on sixteen dependent measures were used to test three hypotheses related to the interaction between the subjects' language and the language cues in standard English materials.

As the data revealed, reading achievement scores were below expected grade levels. In addition, mastery levels on the four

criterion-based subtests averaged only 48%.

An analysis of the norm-based results showed that the good readers comprehended about as well as expected given their below grade level performance on the Vocabulary subtest. Here it was hypothesized that a lack of skill in word meanings affected both test results. In contrast, the poor readers' below grade level performance was attributed to a paucity of word analysis skills.

The statistical tests of significance substantiated the findings of the large group data. The good readers made proficient use of graphophonic cues and significantly generated fewer grammatically disruptive miscues than the less proficient readers. Yet, their miscues resulted in the same degree of meaning loss as the other readers. In contrast, the deficit readers failed to efficiently use all three language cueing systems. Unlike the other readers, they read in a halting, unsure fashion producing in turn, a high percentage of complex miscues that totally disrupted the underlying structures of the test passages.

The difference readers were judged ineffectual since they tended to use grammatical and graphophonic cues at the expense of meaning cues. As a result they read rapidly, producing in turn, a damaging number of non-word miscues that were semantically disruptive to the meaning of their passages.

The results of the study verify the existence of a reading problem in the sample population. Together, the data warrant the following conclusions: 1) no group of readers was observed to make

highly effective use of oral or silent reading strategies as a means of facilitating meaning acquisition, 2) regardless of reading ability, subjects encountered difficulties consistently maintaining the grammatical and meaning structures of materials written in standard English, 3) few subjects were able to adequately verbalize about the stories they read.

Behind the results lie two consistent factors--deficiencies in mechanical skills and unfamilarity with word meanings and concepts. In view of the evidence, two levels of linguistically-related reading difficulties are inferred. Indirectly, instructional goals that have emphasized the aim of the reading program as the "development of clear and fluent speech" may have undermined the acquisition of basic reading skills in this population. Directly, semantic aspects of Trinidadian vernacular may have interfered with the subjects' ability to gain meaning from words and ideas that are outside their realm of experience.

APPROVED BY: Wayne Otto
Wayne Otto

DATE: July 17, 1978

CHAPTER I

INTRODUCTION

Problem

The purpose of this study was to describe and analyze the oral and silent reading performance of selected subjects in Trinidad and Tobago, West Indies. Specifically, this study sought to answer two questions. First, what is the overall reading ability of selected Standard IV students, i.e., fifth year of formal education, as measured by norm- and criterion-referenced reading tests? Second, what is the extent to which linguistically-related reading difficulties are manifested by selected Standard IV subjects in their oral and silent reading performance?

A review of the literature indicated that the reading performance of nonstandard English speakers tends to be lower than the reading performance of standard English speakers. Labov (1972a) reported that American urban speakers of Black dialect were more than two years below grade level, according to standardized reading achievement tests. Venesky (1977) cited nationwide reading scores to show that the performance for "inner urban" subjects was 10 percent below national norms. Walker (1975) found that the reading performance of white Newfoundland dialect speakers of Twillingate was also below expected grade levels. And, reading scores obtained from West Indian students in the United Kingdom as well as in the Caribbean have been below grade and age levels (Yule, Berger, Rutler, and Yule, 1975; Carrington, 1972; Edwards, 1976).

Several hypotheses have been advanced in recent years to account for the high incidence of reading failure among dialect speakers. Goodman (1965) speculated that dialect divergence and reading failure were directly related. Miscue studies (Sims, 1972; Walker, 1975; Goodman and Burke, 1973; Lui, 1975), however, demonstrated that non-standard English speakers tend to be proficient readers when they receptively control i.e., understand, standard English structures. Others have speculated that teacher rejection or misunderstanding of dialect-based miscues might impede the nonstandard dialect speakers use and development of efficient contextual strategies. Goodman and Buck (1973) have argued that skill in reading for meaning would be undermined whenever students are required to read orally in an accurate word-by-word manner. Labov (1972b) has theorized that teacher rejection or misunderstanding of dialect-related speech forms may impede the students' development of word recognition skills.

Despite these claims the precise relationship between dialect and reading failure has not been resolved. In order to clarify this issue and to increase the context in which it might be understood it was necessary to identify an English speaking community where reading abilities were presumably affected by these factors. The research indicated that the potential for dialect-related reading failure existed throughout the English speaking West Indies. Hence, manifestations of dialect-related reading problems were investigated in Trinidad and Tobago, a developing country in the West Indies where speech patterns range from creolized forms of English on one extreme

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However, the process is disrupted whenever a linguistic mismatch exists between the reader's oral language and that of the author.

Baratz (1973a) verified the existence of an interfering effect for nonstandard English speakers who attempted to use standard English. She administered a sentence repetition test to black inner-city and white lower-middle class students. Half of the sentences were in standard English; the remaining were in Black dialect. The nonstandard speakers transformed the standard sentences into their own speech patterns. The standard speakers transformed the nonstandard sentences into their own patterns. This indicated that neither group was bidialectal, i.e., speakers of two dialects. Consequently, she concluded that the black children would encounter difficulties whenever they needed to perform in standard English.

In another study, Baratz (1973b) found that learning to read was significantly correlated to facility with standard English. Using a sentence repetition test, she identified children as speakers of Black dialect, speakers of standard English, or speakers of both. Next, she administered a standardized reading test to them. The results indicated that the highest achievers were the standard English speakers. The middle group consisted of the bidialectal speakers and the lowest scores were registered for the Black dialect speakers. On the basis of these results, Baratz (1973b) and others (Stewart, 1969; Leaverton, Davis, and Gladney, 1968) argued that dialect speakers would learn more efficiently in materials that utilized nonstandard grammatical structures.

Venezky and Chapman (1973, p. 68) questioned the need to develop these materials. They pointed out that sentence repetition tests were an invalid measure of a dialect speaker's comprehension. As such, these tests only focused on the speaker's productive, not receptive, control of his language. Consequently they felt more data were needed to show that dialect differences, per se, really interfered with learning to read.

In a dissertation study, Melmed (1973) sought to investigate the relationship between Black dialect phonology and reading interference. He found that black students were unable to auditorily discriminate standard English word pairs as well as white students. Yet black and white subjects did not differ in silent or oral reading comprehension. And, contrary to Baratz's data, the non-white subjects spoke standard English 70 percent of the time. Melmed (1973, p. 81) concluded, "these third graders have had enough exposure to standard English in their everyday activity to aid them in recognition of the printed standard English word."

In order to test the utility of dialect materials, Sims (1972) constructed passages in standard and nonstandard forms. Ten second grade nonstandard English speakers orally read one story from each form. Results were taped; responses that differed from the test were analyzed to detect qualitative and quantitative differences. No significant differences in the number and quality of the miscues were found. Furthermore, the miscues generated by language differences did not affect the meaning of the passages. Sims concluded that

there was no need to create the specific dialect materials that Baratz and others had called for.

Walker (1975, pp. 63-78) tested the hypothesis that dialect divergence interferes with oral reading. A sample of third-grade subjects in a dialect speaking community in Newfoundland was asked to read passages in standard and nonstandard forms. Students read the standard passages with fewer errors than in the nonstandard passages. Walker deduced that this occurred because the subjects had developed "sophisticated intuitions" about standard English structures. He attributed these intuitions to media exposure and to the school's insistence on correct standard English usage.

Liu (1975) analyzed the oral reading miscues of dialect speakers in order to assess the degree of syntactic and semantic interference they encountered in print. Thirty subjects in the second and third grades were given standard and nonstandard passages to read aloud. They were also asked to retell each story. Data analysis indicated that the miscues on the standard English passages did not disrupt meaning any more than the miscues generated on the dialect passages.

After several years of miscue research and development, Goodman and Burke (1973, pp. 91-96) reported that the miscues generated by dialect speakers generally did not disrupt the reading process. The results indicated that the largest number of miscues were pronunciation differences. None of these phonemic variations, e.g., wif for with, caused changes in the syntactic or semantic patterns of the passage. Semantically, it was found that readers frequently

substituted acceptable synonyms that had no effect on the deep structure of the passage. Syntactically, dialect substitutions were usually limited to highly predictable inflectional transformations. The most frequent shifts were losses of past tense markers, noun plurals, s forms of verbs, and possessives. Similarly, these surface level variations did not disrupt the underlying meaning of the passage.

The authors also reported that less proficient readers used dialect patterns more often than proficient readers. Conversely, many of the proficient readers who showed no signs of dialect in their reading used nonstandard forms when asked to retell the story. This led Goodman and Buck (1973, p. 11) to infer that "we know that highly proficient readers produce few dialect-based miscues while reading with high comprehension. This has to be the result of increased receptive control over the high-status dialect."

These and similar developments combined to undermine the theory of a direct relationship between dialect and reading failure. Contrary to the assumption that dialect divergence caused reading failure, the miscue studies found that dialect-based errors did not affect the reader's ability to understand what he had read. And furthermore, the evidence indicated that dialect speakers who receptively controlled standard English structures tended to be proficient readers. Accordingly, Venezky and Chapman, (1973); Gibson and Levin, (1975); Page and Barr, (1976) and others concluded that there was no direct relationship between dialect and reading failure. In

fact, Goodman reversed his stand by stating that his interference theory was "untrue" (Goodman and Buck, 1973, p. 6).

Despite these findings other aspects of the relationship between dialect and reading failure were unclear. For one thing the selection of subjects in several studies raised questions about the representativeness of the data. For example, Baratz (1973b) reported that Melmed's subjects were "atypical" of disadvantaged children because they were all reading at or above grade level. Thus it was unwarranted to conclude from his data that dialect speakers, per se, receptively controlled standard English structures.

Secondly, the miscue data left unresolved the fundamental question of precisely what aspects of dialect directly affected reading comprehension. Although the miscue studies indicated that dialect-related miscues generally involved non-disruptive phonemic variations, inflectional transformations, or semantic substitutions, others reported that dialect speakers encountered comprehension difficulties in materials that contained unfamiliar syntactic structures or difficult vocabulary items (Burke 1972; Philion, William, Galloway, 1969; Werner, Simonian, Smith, 1967; Melmed, 1973).

The third question that was not resolved concerned the probability that dialect variations in oral reading, although non-disruptive to underlying structures, would nevertheless be rejected by classroom teachers. In the miscue studies subjects were told to read for meaning; they were neither interrupted nor corrected for dialect-based miscues. Moreover, their variations were not counted as errors.

The likelihood that dialect accomodation would be practiced by classroom teachers was questioned by Labov (1970). Venezky and Chapman (1973, p. 69) reiterated this concern by stating that the potential for teacher rejection of dialect-based miscues, i.e., indirect interference, was "enormous."

This issue was investigated by Piestrup (1973) who rated fourteen teachers in terms of teaching style. She labelled two of the styles Black Artful teachers and Interrupting teachers. Black Artful teachers set high expectations for their children and successfully taught them to attend to vocabulary, sound and structural differences between Black dialect and standard English forms through informal, non-threatening, rhyme-type games. Interrupting teachers on the other hand, characteristically asked their students to repeat many words and oftentimes interpreted dialect-based errors as reading errors. Piestrup (1973, p. 3) cited the following dialogue as evidence of dialect conflict:

T . . . how would you harm the colt?

C^1 Tear it.

T Huh?

C^1 Tear it.

T Th-- th-- Oh! Do you know what a colt is, now?

C^1 Oh, kill it, kill it!

T No, what's a colt?

C^1 Somethin' you wear (Episode 18)

Children in the Interrupting Group appeared to Piestrup as if

they worked "tediously" alone on decoding with no understanding of what the words meant. Others merely guessed at words.

She also found children who had withdrawn from reading activities as in the following episode:

T Off

C^1 Off to the ---

T OK. It says "woods."

C^1 --- wood.

T We would say woods --- this book was written in England.

C^1 Now I'm through. I ain't gonna read this page again.

T OK. Well we're gonna turn the page and we're gonna read the next page.

C^1 Uh uh! Darren 'sposed to be first. (Piestrup, 1973, p. 6).

Results on an end-of-the-year comprehension test showed that the Interrupting Group was significantly lower than the Black Artful Group. There were also signs of more dialect divergence in speech patterns for the Interrupting Group. Piestrup felt that the teachers who negatively focused on speech differences helped to alienate children from the learning process.

In another study, the effects of teacher rejection of dialect speech patterns possibly accounted for the poor reading performance of third-grade Newfoundland subjects. Walker (1975, p. 75) reported that the reading performance of subjects in his dialect interference study were below national norms. He also inferred that these subjects were able to read standard English selections with fewer errors than

dialect passages because they had acquired receptive control of standard English structures. This language flexibility, according to the author, was related to the schools' insistence on correct standard English usage. Although Walker did not state that school policies and reading achievement were related, he did conclude that dialect "might contribute to the slow acquisition of reading skills."

Explicit statements of these relationships were subsequently proposed by Goodman and Buck (1973, p. 11) and Labov (1972b). In Goodman's model, teacher rejection of dialect-based miscues forces the reader to attend to accurate word-for-word pronunciation lest he be corrected for making a mistake. Consequently, the purpose for reading is not to gain meaning but to please the teacher. Under these conditions, the reader will ignore contextual cues, relying instead on decoding or pronunciation information. As a result, the nonstandard dialect speaker's development of efficient reading strategies will be impeded.

Labov attempted to explain the effects of indirect interference in terms of the reader's development of accurate decoding skills. In his paradigm, readers who are misunderstood or corrected for dialect-related variations will be confused about the nature of the standard English spelling system. For example, Labov (1972b) cites the teacher who insists that cold and coal are different "without realizing that the child perceives this as only a difference in meaning, not in sound." In this situation, the child tends to develop a "vague confusion" about the endings of words and may stop

using graphic information to decode, relying instead on wild guessing after the first letter is recognized. Labov also predicted that some readers will switch their word recognition strategies from letter-sound association to whole word methods.

These explanations predict reading difficulties for nonstandard dialect speakers who are subject to teacher misunderstanding or rejection of their speech patterns. In Goodman's language-based model, the reader's attention to contextual information will be impeded. Consequently, reliance on letter-sound information will continue to be manifested. Labov's explanation is closer to Samuel's (1976) definition of the reading process wherein accurate, automatic decoding skills need to be developed before attention can be directed toward meaning. In both cases, there is reason to believe that dialect interference will tend to undermine the dialect speaker's development of fluent reading skills.

In summary, the review of the literature has shown that the reading process for dialect speakers may be disrupted in a variety of ways. The evidence indicates that dialect speakers who do not receptively control standard English structures will tend to be inefficient readers. That is, the extent to which a dialect speaker controls standard English structures will likely affect his/her ability to comprehend materials written in these forms. There is also reason to believe that dialect speakers whose dialect variations are rejected by classroom teachers will not develop adequate comprehension strategies. Goodman and Buck (1973) have speculated that

efficient use of contextual strategies will be impeded if dialect-based miscues are misunderstood or rejected by teachers. Labov (1972b) has theorized that similar teacher attitudes will affect the student's development and use of word recognition strategies.

Thus, in a dialect speaking population where receptive control of standard English may vary and where teacher rejection of dialect-based miscues is likely to occur, readers may encounter difficulties in materials that contain unfamiliar syntactic or semantic structures or in tasks that require an understanding of what has been read. However, data to support these claims are tentative. Consequently, the extent to which reading in such a community has been undermined by these factors can only be guessed at.

Oral and Silent Measures of Reading Proficiency

Miscue Analysis. One way to evaluate reading proficiency is to qualitatively measure a reader's control of the oral reading process. Miscue analysis provides the diagnostic framework to do this. This approach is based on a model of the reading process that depicts the reader as a cue sampler who is actively involved in anticipating and verifying printed structures in terms of his prior language experiences. The reader's success in this process is evidenced in the quality of his miscues or responses that do not conform to what was expected (Burke, 1976). Oftentimes a reader will produce structures that are different from the text; by evaluating the miscues in relation to the linguistic cues that were used, as well as those

that are available, insights into the disruptive nature of the deviation can be obtained. Furthermore, inferences concerning the effects of the reader's language system on the meaning of the passage are possible.

Goodman and Burke (1973) conducted a three-year study of oral reading miscues in order to produce a base-line description of the reading process. Ninety-four students, ranging in reading levels from low second grade to high tenth grade, were chosen to participate in the study. Procedurally, each subject was asked to orally read an unfamiliar selection and was later expected to retell it. Each session was taped and later analyzed according to the Goodman Taxonomy of Reading Miscues (Allen & Watson, 1976).

Quantitatively, miscues were summed, multiplied by 100 and divided by the total number of words in the passage. This score, called Miscues Per Hundred Words (MPHW), or $MPHW = \frac{100M}{W}$, was consistently related to reading proficiency.

Qualitatively, miscues were categorized and evaluated in terms of nineteen taxonomy questions. The data suggested that some miscues were more likely to be corrected than others. Those that resulted in unacceptable syntactic or semantic structures were corrected about 14% to 20% of the time. Likewise, no group corrected more than 30% of all miscues. According to Goodman, the tendency to correct unacceptable structures demonstrated the reader's search for deep grammatical structure. For this reason, it was stated that the best indicator of reading proficiency was a Compre-

hending score, or the percent of all semantically acceptable and corrected miscues in the passage.

Another score that was reported was the Comprehension Rating which supposedly assessed the reader's effectiveness in understanding the author's message. This rating reflected the reader's ability to retell the story.

Together, the findings from this study indicated that the readers varied in their utilization of graphophonic, syntactic, and semantic information. Proficient readers depended less on the cueing information; conversely, poorer readers were less efficient because they used more graphic, syntactic, and semantic information than was required.

Goodman (1973) reported that inefficient readers were also overly concerned with reading to satisfy another person as opposed to gaining meaning. Characteristically, they tended to omit words, read word-for-word, and sounded out unfamiliar words with little concern for meaning. Furthermore, they were unable to recognize when miscues needed correction. Oftentimes, inefficient readers corrected miscues that did not change meaning, but failed to do so with the ones that did.

Page and Barr (1975) felt that the number and type of miscues corrected offered further insights into the reader's control of the process. Syntactically and semantically acceptable miscues that did not prompt correction attempts indicated that the reader's semantic and syntactic systems permitted verification of the original guess,

or that the graphophonic discrepancy did not cause dissatisfaction. On the other hand, if no pauses or hesitations were recorded before or after the miscue, there was a likelihood that the reader was manifesting a weak graphophonic, i.e., decoding, system. Correction attempts on similar miscues indicated that the reader's decoding system was operating. If the correction was successful a good system was inferred. Abandoned attempts were evidence that the system was weak. An overall weakness of all systems--syntactic, semantic, and graphophonic--was deduced for a high percentage of no correction attempts on syntactically and semantically unacceptable miscues.

Reading Achievement Tests. A second way to evaluate reading proficiency is to interpret the difference between the Vocabulary and Comprehension subtest scores on a reading achievement test. One of the most important questions that can be asked regarding the differences between these scores is: "Does the student comprehend at a level that might be expected from his Vocabulary score?"(Gates and MacGinitie, 1972, p. 4)? If a student's standard score on the comprehension subtest is significantly lower* than his score on the

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*Regarding the Gates-MacGinitie Reading Tests, values for computing minimum significant differences between Vocabulary and Comprehension standard scores are provided in the Technical Manual, Gates-MacGinitie Reading Tests (Gates & MacGinitie, 1972, p. 12).

vocabulary subtest it may indicate that although he has mastered word recognition skills he has not developed an ability to read for meaning.[1] Another pattern of reading ability that is suggested by a comparison of subtest scores is that of the student whose scores are about equally below grade level norms. Here, development of reading proficiency may be affected by a lack of development in word meanings (Spache, 1976, p. 261).

Cromer, (1970) used his paradigm to identify two types of poor readers. He subdivided a group of college-age poor readers into two groups--deficit and difference readers. Presumably the deficit group comprehended poorly as the result of deficiencies in vocabulary or phonic skills. In contrast the difference readers had adequate vocabulary skills but still comprehended poorly because they "organized input in a word by word fashion rather than meaningful units such as phrases" (Cromer, 1970, p. 472). Both groups were identified by scores on the Educational Testing Service (1960) Cooperative English Test of Reading Comprehension. Deficit readers scored below the first quartile on both subtests; difference readers averaged above the norm on the Vocabulary subtest but below the first quartile on the Comprehension subtest. A third group of good readers attained subtest scores above the second quartile.

Each group was given a set of four stories that were presented

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[1] Manual for the Gates Advanced Primary Reading Tests. Bureau of Publications, Teachers College, Columbia University, 1961.

in different modes: regular sentences, single words in vertical order, meaningful phrases and fragmented groups. Cromer speculated that if written materials were presented in meaningful phrases the difference readers' comprehension would improve. The results from the Comprehension test indicated that the difference readers comprehended significantly better than the deficit readers on the phrasal mode (the good readers did not improve because they already read in a meaningful way). Thus, the difference readers were helped to read more efficiently when the reading input was meaningfully organized. Conversely, the deficit readers failed to improve because as Cromer (1970, p. 480) concluded, "they have a relative deficiency in a skill important for reading and that this deficiency cannot be overcome solely by manipulating their input of reading material."

West Indian Reading Performance

The West Indies consist of a chain of islands that stretch from Jamaica in the Eastern Caribbean to the northeastern coast of South America. Throughout the region speech varieties operate along a linguistic continuum that separates European-based creoles on one extreme and standard language forms on the other. Here the term creole refers to a form of speech that derives both from European and West African languages (LePage & DeCamp, 1960). Creoles that share most of their vocabulary with French are called Creole French or patois (DeCamp, 1973, p. 15). In the British islands including the former French possessions of Dominica, St. Lucia, Grenada and

Trinidad and Tobago, the creole forms have evolved towards an English-based lexicon (LePage, 1970).

Numerically there are about six million creole speakers in and around the Caribbean and to a less extent in West Africa, South Africa, and South East Asia (DeCamp, 1973, p. 17). LePage (1955) has estimated that at least 85% of Trinidadian school children speak creole--also called Trinidadian Vernacular--in their homes. More recently, the Ministry of Education and Culture recognized Trinidadian Vernacular as the native language of most school children[2]:

> It is the language that most children in our schools speak as a first language. That is, it is the language that they acquire naturally from their homes and community before they come to school and are taught English. It is the language in which they communicate their needs, feelings and ideas to their parents and friends. In fact it is the language that they speak on all occasions except in the classrooms.

Like standard languages, Caribbean creole syntactic structures are sufficiently developed to meet the communication needs of their speakers. Nevertheless, differences between creole structures and standard language forms may be so great "as to make them mutually unintelligible" (DeCamp, 1973, p. 16).

Similar to American Black dialect, English-based creoles sharply reduce grammatical devices that signal number and gender (see Table

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[2] From New Primary School Syllabus, 1975, Ministry of Education and Culture, Trinidad and Tobago.

1). Creole speakers also tend to minimize redundancy in syntax as aptly described by DeCamp (1973, p. 16).

> A creole, like a pidgin, tends to minimize redundancy in syntax. For example, although English pidgins lack any plural marker for nouns, creole English has a plural suffix or enclitic -dem (derived from the English demonstrative them). This suffix is normally omitted when redundant, i.e. when plurality may be inferred from other signals. Thus the standard English the boys, the three boys, and those boys would appear in creole as di bwai-dem, di trii bwai, and dem bwai; neither *di trii bwai-dem nor *dem bwai-dem would occur unless unusual emphasis on the plural was intended.

West Indian vernacular speakers reportedly manifest a variety of reading difficulties ranging from vocabulary deficiencies to inadequate comprehension strategies (Crump, 1970; Lloyd, 1970; Wright, 1973; Edwards, 1976). In Great Britain Yule et al. (1975) found that West Indian students were more than two years below chronological age levels on tests of reading ability. Reports of West Indian reading difficulties throughout the Caribbean are no less apparent. Carrington (1972, p. 15) described the reading performance of a typical Trinidadian child as, "incapable of reading the lessons in his own reader without first being taught all of the different words, (varying between 10-20 per page)."

Correspondingly, attempts to investigate these problems have focused on the linguistic aspects of instruction. It has been argued

Table 1

Variations Between Standard English, Black Dialect And Trinidadian Vernacular Speech Forms

Feature	Standard English*	Black Dialect**	Trinidadian[3] Vernacular
Plural s deletion	The boys.	The boy.	The boy. The boy dem.
Possessive s deletion	Mary's book.	Mary book.	Mary book.
Third Person Singular s	He wants you.	He want you.	He want you.
Past tense marker ed	We walked home.	We walk home.	We walk home.

Table 1 (continued)

Feature	Standard English*	Black Dialect**	Trinindadian[3] Vernacular
Present for irregular past	She chose a dress.		She choose a dress.
Subject verb agreement	He has a ball.	He have a ball.	He have a ball.
Linking verb	He is going.	He going.	N + be + adj. The girl----pretty N + be + adv. (unflected) The girl----here
Habitual verb	He is here all the time.	He be here.	He does walk.

Table 1 (continued)

Feature	Standard English*	Black Dialect**	Trinidadian[3] Vernacular
Pronouns (Possessives)	His book.	He book.	He book.
Post Tense for state verbs	I loved here.	Not reported	I <u>did</u> love she.
Locatives	He's going to the cinema.	Not reported	He going theatre.
There is/are and noun phrase	There are two men in the bus.	Not reported	<u>It have</u> two men in the the bus.
Verb future and past	I will go home.	I'ma go home.	I go home.

Table 1 (continued)

Feature	Standard English*	Black Dialect**	Trinidadian[3] Vernacular
Negation	I don't have any.	I don't got none.	She en have no book. He doh like to go to school.
Interrogative yes/no question	Are you going to school?	Not reported	You going to school?
Tags	You like mangos, don't you?		You like mango, ent?
	How does he make out?	Not reported	How he does make out?
Verb Form	I drank the milk.	I drunk the milk.	Not reported
If construction	I asked if he did it.	I asks did he do it.	Not reported

Table 1 (continued)

Feature	Standard English*	Black Dialect**	Trinidadian[3] Vernacular
Indefinite article	I want an apple.	I want a apple.	Not reported

*Here, standard English is viewed worldwide as differing little in grammar, vocabulary and spelling. According to Quirk and Greenbaum (1973) standard English is nearly uniform in "neutral or formal styles of written English on subject matter not of obviously localized interest." Pronunciation differences are the most immediate and complete features that identify English as belonging to one of the predominant national standards i.e., British and American English.

**The features of Black Dialect were taken from Baratz (1973a).

[3]See Footnote 2.

that West Indian children should not encounter structural conflicts in learning to read standard English since they control structural and semantic features of the more formal language. According to Craig (1973, p. 232) West Indian speech patterns operate along a continuum (see Figure 1) that separates creole on one extreme and standard English on the other. Most school children presumably control creole forms as well as higher level variations. Consequently, this flexibility allows them to function accordingly in different linguistic situations such as on the playground, where informal patterns are appropriate, and in the classroom, where more formal styles are required.

Wight (1973) stated that this flexibility should favor the West Indian immigrants' adaptation to the standard English requirements of the British school system. Nevertheless, Townsend (1971, p. 5) found that many teachers in Great Britain regarded West Indian speech as retarded or as a badly spoken form of English. Crump (1970) stated that many West Indian children who are apparently English speaking "have many bad speech habits, and idiomatic ways of expressing themselves and are often loathe to change to normal." Hawkes (1966) estimated that as high as 15% of these students are judged to be in need of special language instruction. Oftentimes, these children have been placed in educationally subnormal, e.g., special classrooms, on the assumption that their language differences were due to retardation. In fact, the largest percentage of students enrolled in these classes have been West Indians.

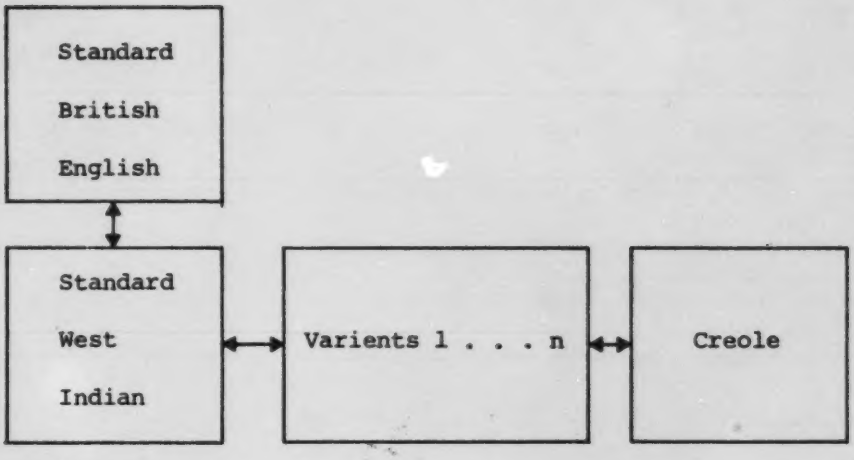

Figure 1. West Indian Linguistic Continuum*

*"Education and Creole English in the West Indies." By D. Craig, Pidgenization and Creolization of Languages, Hymes (Ed.), 1973 p. 232.

Until recently similar attitudes towards the use of vernacular speech forms in a school setting were common throughout the West Indies. Townsend (1971, p. 9) for example, quoted the following statement from a Jamaican Ministry of Education White Paper:

> Every fifteen year old Jamaican should be able to communicate in good basic English. This is necessary because the Jamaican dialect has no currency outside Jamaica except Jamaicans abroad.

Likewise, Carrington (1972, p. 13) reported that Trinidadian teachers have been instructed to take "every opportunity...in school and out to correct common errors of speech."*

In part, these attitudes have been fostered by the widespread assumption that West Indian social status depended on one's ability to speak standard English (Craig, 1973, p. 235). Correspondingly, West Indian language arts syllabi have traditionally stressed the acquisition of standard English speaking and writing skills. Oftentimes, however, concern for the productive language skills has undermined the development of receptive skills. In Trinidad and Tobago for example, the stated goal of the reading program in the primary grades has been the "development of clear and fluent speech" (Carrington, 1972, p. 21). Reading lessons are frequently taught by

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*With the publication of the New Primary School Syllabus (see Footnote 2) Trinidadian teachers have been asked "not to stamp out the use of the child's first language but help him acquire another internationally acceptable English."

the "teacher calling each word separately and having the class repeat it before proceeding to the next" (Carrington, 1972, p. 50). Children pass a story if they can read all the words correctly; if not the story is repeated the next day.

Accordingly, "this word by word teaching with its emphasis on proper pronunciation . . . conveys to the child the impression that the recognition of individual words, rather than the sense of the passage, is all important" (Carrington, 1972, p. 50).

Hypotheses

There appears to be an enormous potential for linguistically related reading problems throughout the English speaking West Indies. On one hand, students who have not fully acquired receptive control of standard English may not be able to adequately comprehend standard English materials. On the other hand, teacher rejection of dialect-related speech forms may impede the development of efficient reading strategies.

In order to determine the extent to which linguistically-related reading difficulties were manifested in Trinidad and Tobago, reading test scores of selected Standard IV subjects were collected and analyzed. In more specific terms, norm- and criterion-referenced tests were used to assess overall reading ability. Here, the answers to four questions were sought:

1. What are the descriptive characteristics of individual and group raw scores for selected good and poor Standard IV

readers in Trinidad and Tobago on the Gates-MacGinitie Reading Test, Survey D, Level I?

2. What are the descriptive characteristics and performance levels of selected good and poor Standard IV readers in Trinidad and Tobago on the Beginning Consonant Test, Variant Consonant Test, Long Vowel Test, and Base Words and Endings Test of the Wisconsin Tests of Reading Skill Development-Word Attack?
3. Did selected good and poor readers in Trinidad and Tobago do as well on the Comprehension subtest of the Gates-MacGinitie Reading Test as would be expected from their scores on the Vocabulary subtest of the same test?
4. What are the correlation coefficients between the Vocabulary and Comprehension subtest scores on the Gates-MacGinitie Reading Tests and the four subtests of the Wisconsin Test of Reading Skill Development--Word Attack for selected Standard IV readers in Trinidad and Tobago?

In addition, oral reading data were used to detect differences in the number and quality of miscues generated by good, deficit and difference readers in standard English materials. Specifically three hypotheses were tested. The first hypothesis dealt with the readers' mastery and use of the graphophonic cuing system. As stated:

I. There will be no significant differences among good, deficit, and difference readers' mastery levels and use of word recognition skills as measured by:

A. Subtests of the Wisconsin Tests of Reading Skill Development: Word Attack.

1. Beginning Consonant Sounds
2. Variant Consonant Sounds
3. Long Vowel Sounds
4. Base Word and Endings
5. Combined WTRSD Scores

B. The Oral Reading Miscues

1. Graphic similarity
2. Sound similarity
3. The number of unsuccessful correction attempts on non-words.

The purpose of the second hypothesis was to determine the extent to which good, deficit, and difference readers maintained the syntactic and semantic structures in standard English materials that they were asked to read aloud.

II. There will be no significant differences among good, deficit, and difference readers' ability to maintain the syntactic and semantic structures in standard English materials as measured by:

1. Dialect-based miscues
2. Grammatical strength patterns
3. Grammatical partial strength patterns
4. Grammatical weakness patterns

The third hypothesis was related to an analysis of good, deficit, and difference readers' ability to gain meaning during and after the oral reading of materials written in standard English. As stated:

III. There will be no significant differences among good, deficit, and difference readers' ability to gain meaning in standard English materials as measured by:

1. No comprehension loss patterns
2. Partial comprehension loss patterns
3. Loss of comprehension patterns
4. Retelling scores

CHAPTER II

METHOD

Design

The Gates-MacGinitie Reading Test, Survey D, Form 1 (Gates and MacGinitie, 1965) and four subtests from the Wisconsin Tests of Reading Skill Development--Word Attack (Otto, Kamm, Miles, Van Vlaricom, & Harris, 1970), hereafter referred to as WTRSD, were administered to 200 students identified as good or poor readers by their classroom teachers in the Port of Spain, St. Georges, Caroni and North Eastern districts of Trinidad and Tobago, West Indies. One hundred and ten of the Gates-MacGinitie Reading Tests were randomly selected and handscored on the island. Raw scores were converted to standard scores. Subjects were identified as good, deficit, and difference readers according to Vocabulary and Comprehension standard scores. Good readers attained standard scores of 50 or above on both subtests. Deficit readers scored 44 or below on both subtests (bottom quartile). Presumably comprehension failure in this group was related to weak phonic skills or vocabulary deficiencies. And finally, subjects who were good decoders (standard score 50 or above) but poor comprehenders (standard score 44 or below) were designated as difference readers. Reading failure in this group was presumably related to word by word reading.

Following this stratification 33 subjects across the ability groups were randomly selected to participate in the second phase

of the study. Twenty-three of the selected subjects were given test passages to read aloud and were asked to retell them in their own words.* This information was recorded on a cassette tape and later analyzed according to the procedures outlined in the Reading Miscue Inventory Manual: Procedure for Diagnosis and Evaluation, hereafter referred to as the RMI (Goodman & Burke, 1972). Figure 2 presents the design conceptualization used in this study.

Instrumentation

Gates-MacGinitie Reading Tests

Reading achievement was measured by the Vocabulary and Comprehension tests of the Gates-MacGinitie Reading Test, Survey D, Form 1, (Gates & MacGinitie, 1965). Johnson (1973, p. 75) reported that the instrument "contained no more cultural bias than other widely used American, Canadian or English reading achievement test."

The test is a normed standardized instrument that assesses reading vocabulary and comprehension in the following way:

> The Vocabulary Test samples the student's vocabulary. This test contains 50 items, each consisting of a test word followed by five other words, one of which is similar in meaning to the test word. The student's task is to choose the word. The first items are composed of easy and commonly used words. Gradually the words become less common and more

*A complete discussion of the sampling procedures used in this study is found on pages 50 to 62.

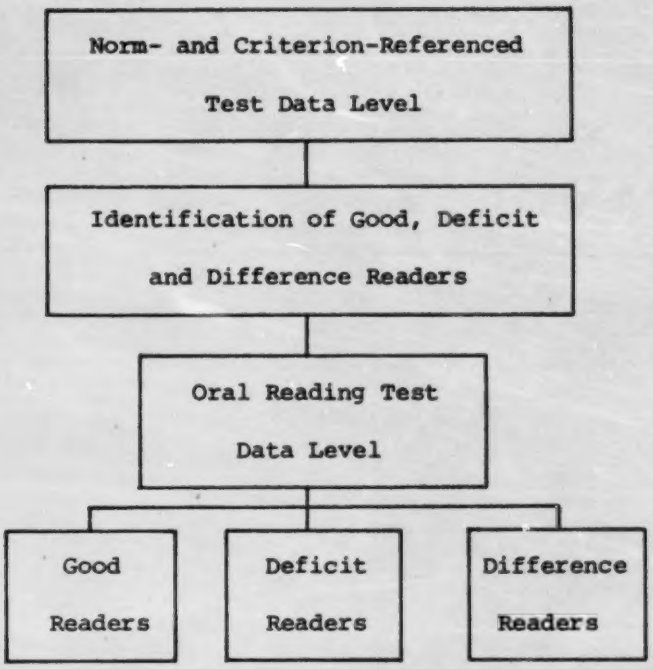

Figure 2. Design Conceptualization

difficult.

> The Comprehension Test measures the student's ability to read complete prose passages with understanding. It contains 21 passages in which a total of 52 blank spaces have been introduced. For each blank space a choice of five completions is offered. The student must decide which one of the five completions best conforms to the meaning of the whole passage. The first passages are simply written, but the later ones become progressively more difficult (Gates-MacGinitie, 1965, p. 1).

Alternate form reliabilities between Forms 1 and 2 are .85 for Vocabulary and .83 for Comprehension. Split half reliabilities are .88 and .94. Farr and Anastasiow (1969) reported that validity evidence for this test is limited to face validity; however, they stated that it is one of the better instruments for measuring reading achievement.

Wisconsin Tests of Reading Skill Development--Word Attack

Specific word analysis skills were measured on four subtests of the Wisconsin Tests of Reading Skill Development--Word Attack. The subtests were: (1) identification of beginning consonants in synthetic words, Test 3, Level B (Hoyt *r* .72); (2) identification of variant consonants in synthetic words, Test 2, Level C (Hoyt *r* .82); (3) identification of vowel correspondences in synthetic words, Test 4, Level C (Hoyt *r* .84); and (4) ability to identify base words and

endings, Test 11, Level B (Hoyt r .84). Taken together, these subtests assess phonic and structural skills that are accepted components of reading ability (Johnson, 1973, p. 75).

These subtests are not standardized but are criterion-referenced. A brief description of each subtest follows:

Test 3, Level B - Beginning Consonant Sounds (20 items). This test is divided into two parts. In the first part, ten nonsense words are dictated to the class; children decide which letter, from a choice of four, corresponds to the first sound of each word. In the second part (10 items), the children determine whether dictated nonsense word pairs begin with the same sound. Response choices are marked "yes" or "no."

Test 2, Level C - Consonants and Their Variant Sounds (24 items). The child determines whether underlined letters in pairs of words(e.g., cider and cake) have same or different sounds. Variant sounds tested are c, s, and g. Response choices are marked "same" or "different." No pronunciation information is provided.

Test 4, Level C - Long Vowel Sounds (29 items). The child identifies the vowel sound heard in dictated nonsense words; additionally, he determines whether the vowel sound is long or short. Response choices are a, e, i, o, u and long and short.

Test 11, Level B - Base Words and Endings (12 items). The child identifies from three response choices the correctly underlined base word. No pronunciation information is provided.

Reading Miscue Inventory

The RMI was used to evaluate a subject's ability to orally read and understand materials written in standard English. Consequently, each of the test passages used in this study were taken from the RMI: Tapings for Readings (Goodman & Burke, 1972). Table 2 lists the test passages by title, readability level, word length and story content.*

The investigator used the RMI according to the guidelines specified by Goodman and Burke (1972). In more specific terms:

1. The subject's reading of an unfamiliar passage was recorded on a cassette recorder. Following this the student was asked to retell the story in his/her own words.
2. Later the investigator replayed each tape in order to identify and mark all observed miscues and variations on a work sheet. Five types of variations were marked: substitutions, omissions, insertions, reversals, and repetitions. Table 3 illustrates the types of miscues and variations that were marked for analysis.
3. Next, the miscues for each subject were entered on a coding sheet in the same order that they were produced.* Decisions regarding selection of miscues e.g., should a partial substitution that is corrected be coded as a miscue, were made in reference to the guide-

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* The Fry Readability Formula (Fry, 1968) was used to determine the readability of each passage because it was easy to administer and was highly correlated to other readability formulas.

Table 2

Titles, Number of Words, Readability Levels,

Plots and Themes of Test Selections

Name	Number of Words	Readability	Plot*	Theme*
The Old Man, His Son and the Donkey	428	1[2]	What happens to the man, the boy, and the donkey on the way to town?	You cannot please everyone. If you try, you only make a donkey of yourself.
War on small deer	633	2[2]	How will small deer get the fruit on the other side of the river?	If you're clever you can outwit your opponents, even if they are stronger.

Table 2 (continued)

Name	Number of Words	Readability	Plot*	Theme*
Space Pet	742	4[2]	What causes Claribel, the canary to faint, and how are the men on the space station affected?	No matter how complex and expensive machines are, they will never replace living things.
Zoo Doctor	1,039	4[2]	Will the doctor be able to find a way to give Sundana her medicine?	Where there's a will, there's a way. If at first you don't succeed, try again.
Why the Parrot Repeats Man's Words	962	5	Will the farmer be caught for taking his neighbor's buffalo? Will the lorikeet be believed?	You are not always rewarded for being turthful.

Table 2 (continued)

Name	Number of Words	Readability	Plot*	Theme*
First Kill	2,080 (512)**	8	Will Hawk be able to kill his first buffalo and become a hunter?	Each individual must decide when he is ready to take on the responsibilities of an adult. Once the decision is made, he is on his own proving himself.

*The plot and theme descriptions are from Goodman and Burke (1972).

**The number of words actually read in this passage.

Table 3

The Types of Miscues Marked

For Oral Reading Analysis*

Type of Miscue	Example
Substitution	So the son get ~~on~~ up on the donkey's back.
Omission	What is the matter (old) tirl?
Insertion	You gave yourself away ^ too . . .
Reversals	"There he goes," (she said).
Repetitions	
Successful correction attempts	But it did (C) not ^ them no good.
Abandoned correction attempts	(AC) After Are you a crocodile?
Unsuccessful correction attempts	The stick was (uc) franking flat floating on the water.

*Hesitations were marked on the worksheet but were not coded for miscue analysis.

lines for miscue coding specified in the RMI (Goodman & Burke, 1972, p. 42-45).

4. Once this was accomplished, the investigator evaluated each miscue according to seven questions. Presumably these questions examined the effects of all the language cueing systems operating within the reading process (Goodman & Burke, 1972, p. 19). A specific discussion of each question follows.

Question one: Dialect. Is a dialect variation involved in the miscue? In order to mark dialect miscues there has to be a difference between what the reader usually says and the expected response. Goodman and Burke (1972, p. 51) state that it is "necessary to know the student well enough to recognize the forms that s/he uses in oral language." Since the investigator did not personally know the students well enough to recognize individual dialectal variations, he marked as dialect miscues only those forms that were generalized features of Trinidadian vernacular as specified in the New Primary School Syllabus: Trinidad and Tobago (see Table 4).

Goodman and Burke (1972, p. 50) advised that once miscues have been marked as dialect-based, all other questions in the inventory are "answered in terms of whether the miscue would be acceptable or

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*Rather than use the first 25 miscues, the investigator coded all deviations from text. This was done to preserve the qualitative and quantitative changes that presumably would occur in textual reading (Menosky, 1971).

Table 4

Grammatical Features of Trinidadian Vernacular

Coded as Dialect Miscues

Feature	Standard English	Trinidadian[4] Vernacular
Consonant cluster reduction resulting in syntactic change.	walked /t/	walk
past tense marker for regular verbs ed	fined /d/	fine
3rd person singular present tense: s	twists	twis
Morphophoemic reductions: inflectional markers for possessives and plurals.		
possessive s	The man's hat.	The man hat.
plural s	Many boats.	Many boat.
Adverbs formed from adjectives with ly suffix.	quickly	quick

Table 4 (continued)

Feature	Standard English	Trinidadian[4] Vernacular
Absence of prepositions indicating locative and temporal aspects.	I am going to the town.	I going town.
	I'm leaving on the next flight.	I'm leaving next flight.
Omission of copula be	Betty is pretty.	Betty pretty.
Regular present for irregular past verbs (Wright, 1970, p. 16).*	I came home.	I come home.
Subject verb agreement (Wright, 1970, p. 16).*	He has a book.	He have a book.
Over corrections (Cassidy, 1961, p. 58).*	brought	brought ted

*The following are features of West Indian creole not specifically cited in the New Primary School Syllabus for Trinidad and Tobago.

[4]See Footnote 2.

understandable in the reader's dialect." Specifically, they stated that questions about grammatical acceptability and semantic acceptability should be answered "in terms of whether the miscue occurs in a grammatically or semantically acceptable structure within the reader's dialect--not the dialect approved by school, teacher or text." In the RMI: Complete Kit the coding decisions for six different subjects were provided; four different tapings were also included. Four of the six children were black urban Americans. A comparison of their dialect miscues and coding decisions on grammatical acceptability, semantic acceptability, and meaning change is provided in Table 5. Although many of the coding decisions were systematic, others appeared to be irregular. For example, Wendy ar. Franklin deleted plurals in sides and substituted the regular present tense for the irregular past tense in come for came. In addition, these miscues occurred in the same sentence from the passage, "Space Pet." Nevertheless, they were coded differently; that is, both errors were fully acceptable for Franklin, but they were only partially acceptable for Wendy. No explanation was provided in the RMI manual. However, background information for each child indicated that they came from different socio-economic neighborhoods. Wendy, it was noted, lived in a middle class section of the city and attended a fully integrated school while Franklin lived in the lower middle class section and attended a school that was 80% black.

Assuming that the coders were familiar with each child's oral language systems, acceptability was judged relatively, not according

Table 5

Coding Decisions of Dialect Miscues Presented in

Reading Miscue Inventory: Complete Kit-Practice Analysis Manual

Category	Subject	Observed Response	Expected Response	Grammatical Acceptability*	Semantic Acceptability	Meaning Change**
Past tense marker ed	Wendy	decide	decide	P	P	N
	Franklin	like	liked	Y	Y	N
		want	wanted	Y	Y	N
Irregular past	Wendy	come	came	P	P	P
	Franklin	come	came	Y	Y	N
		hide	hid	Y	Y	N
		choose	chose	Not marked for dialect.		
Plural s	Wendy	side	sides	Y	Y	N
	Franklin	side	sides	Y	N	N
Third singular	Wendy	sound	sounds	Y	P	N

*(Y) designates full acceptability; (P) designates partial acceptability; (N) means unacceptable.

**Here (N) designates no meaning loss; (P) minimal meaning loss.

to generalized features of Black dialect. Otherwise, these variabilities in scoring were caused by coding inconsistencies. Since the investigator was unfamiliar with the speech patterns of each subject in this study, individual dialect judgements were not made. Thus, to insure a measure of intra-judge reliability all dialect based miscues were coded partially acceptable grammatically (P) and semantically (P) as well as no loss for meaning (N).

Question two: Graphic Similarity. How much does the miscue look like the expected response? A high degree of graphic similarity exists if the miscue corresponds to two out of three parts of the expected response. Some similarity exists if the miscue corresponds to one out of three parts of the expected response. No graphic similarity exists if none of the parts of the miscue correspond to the expected response.

Question three: Sound Similarity. How much does the miscue sound like the expected response? A high degree of sound similarity exists if the miscue phonemically corresponds to two out of the three phonemic parts of the expected response. Some sound similarity exists if the miscue phonemically corresponds to one out of the three phonemic parts of the expected response. No sound similarity exists if none of the parts correspond.

Question four: Correction. Is the miscue corrected? Miscues are either successfully or unsuccessfully corrected or not corrected at all.

Question five: Grammatical Acceptability. Does the miscue

occur in a structure which is grammatically acceptable? Some miscues occur in grammatically acceptable sentences that are acceptable to previous and subsequent sentences. Other miscues occur in grammatically acceptable sentences that are not acceptable with the rest of the passage. Still other miscues appear in grammatically unacceptable sentences.

Question six: Semantic Acceptability. Does the miscue occur in a sentence that is semantically acceptable? Some miscues occur in semantically acceptable sentences that are acceptable to all portions of the passage. Other miscues occur in semantically acceptable sentences that are not acceptable with the rest of the passage. Still others occur in semantically unacceptable sentences.

Question seven: Meaning Change. Does the miscue cause a change in meaning? Miscues may extensively change the meaning of the passage. Or, meaning changes may be minimal. In other occurrences, no meaning change is involved.

5. Following the coding decisions, the investigator examined the interrelatedness of the patterns produced by question four (correction), question five (grammatical acceptability), and question six (semantic acceptability). This was done in order to determine how effective each reader was in maintaining the grammatical and meaning structures of the passages in question. According to the guidelines specified in the RMI (Goodman & Burke, 1972, p. 71) eighteen possible patterns indicating the readers strength in using the grammatical and meaning cueing systems are possible. Table 6, illustrates selected

Patterns of Grammatical Relationship made by subjects in this study.

6. In order to determine the extent to which a reader's miscues resulted in loss of meaning a Comprehension Pattern was computed. Here question four (correction), question six (semantic acceptability), and question seven (meaning change) were interrelated according to the patterns specified in the RMI (Goodman & Burke, 1972, p. 76). Table 7 illustrates selected patterns observed in this study.

7. As a final step the investigator evaluated each retelling episode in terms of five categories. Character assessed a reader's ability to recall the characters in the story. Development was concerned with the reader's ability to discuss the character's attributes. Events accounted for the specific sequence of the story. Plot referred to the problem around which the story was organized. And finally, Theme dealt with the reader's skill at identifying the author's point of view. Each category was awarded a designated number of points according to the reader's responses. Maximum points for each category were: Character (15); Development (15); Events (30); Plot (20); and Theme (20).

Data Collection

The investigator modified the scope of the study upon arrival in Trinidad and Tobago. Whereas subjects were expected to be sampled from the Port of Spain district, changes were necessary to accommodate

Table 6

Examples of Selected Patterns of Grammatical Relationships

Patterns of Grammatical Relationships	Selected Examples	Coding Decision
Strength (uses grammatical and meaning cues)	Instead merely imitating the sounds he heard...	6Y (corrected) 7N (not grammatically acceptable) 8N (not semantically acceptable)
Partial Strength (uses grammatical cues only)	...who had been a great warrior in his time	6N (not corrected) 7Y (grammatically acceptable) 8N (not semantically acceptable)
Weakness (fails to use grammatical or meaning cues)	Though he had not known for sure...	6N (not corrected) 7P (grammatically acceptable with prior portions of the sentence) 8P (semantically acceptable with prior portions of the sentence

Table 6 (continued)

Patterns of Grammatical Relationships	Selected Examples	Coding Decision
Overcorrection (over use of correction strategies	Then he rode to the top of a hill...	6Y (corrected) 7Y (grammatically acceptable) 8Y (semantically acceptable)

Table 7

Examples of Selected Patterns of Comprehension

Patterns of Comprehension	Selected Examples	Coding Decisions
No Loss of Comprehension	Dead-come-back-man he had also helped Hawk...	6N (non corrected) 8Y (semantically acceptable) 9N (no meaning change)
Partial Loss of Comprehension	An old farmer and his son were taking their ~~donkey~~ donkies to town.	6N (not corrected) 8Y (semantically acceptable) 9P (minimal change in meaning)
Loss of Comprehension	Get right ~~down~~ roun, he said to his son.	6N (not corrected) 8N (semantically not acceptable) 9Y (extensive meaning change)

subjects from three additional rural districts.* Furthermore, the proposed procedures for the large group random sampling were based on the assumption that reading achievement levels would be normally distributed in each classroom i.e., heterogeneous achievement grouping. The investigator also expected that classroom lists would be accessible for these purposes. Instead classroom placement was generally determined by ability, and classroom lists were not available.

In order to accommodate these changes the following procedures were followed:

1. A list of all government and assisted primary schools in each district was secured. Five percent of the schools in each district were proportionally sampled since the number of schools ranged from a low of 41 for Northeastern to a high of 79 for St. Georges (see Table 8).

2. All Standard IV classrooms in the St. Georges and Caroni sampled schools were identified as either good classes or poor classes according to information provided by respective school officials. Extenuating circumstances prevented representative selection of classrooms in the remaining districts. As a result, testing sites in the Port of Spain and Northeastern districts were determined by apprc-priate Ministry of Education officials.

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*The investigator was advised by Ministry of Education officials that rural Trinidadian students would more likely use dialect forms than students in the Port of Spain district.

Table 8

Sampled Districts by Number of Primary Schools and Standard IV Enrollment

District	Number of Primary[5] Schools	Number of Standard IV Students
Port of Spain	78	4,354
St. Georges	79	4,551
Northeastern	60	1,136
Caroni	41	2,792

[5] A Digest of Statistics on Education, 1970. Trinidad and Tobago Central Statistical Office, 1973.

3. Where a sampled school had only one Standard IV classroom the teacher was asked to identify the 25 best readers or the 25 poorest readers. This was done to ensure that representative numbers of good and poor readers would be chosen for the large group testing. Thus, four good and four poor classrooms or approximately 280 students were chosen across the four districts. Since the investigator was prepared to test only 200 subjects, each classroom teacher was instructed to limit his/her testing to 25 subjects.

4. In order to minimize communication difficulties between the subjects and the investigator, a non-speaker of Trinidadian vernacular, norm- and criterion-based tests were administered by classroom teachers. Prior to the testing sessions the investigator and a district supervisor met with the principals and teachers from three of the four sites. The testing format including the purposes of the tests, the directions and the allotted time for each subtest were uniformly discussed. The same information was given to the district supervisor in the fourth district, who in turn conveyed it to his classroom teachers.

The testing procedures recommended and followed by all teachers is summarized in Table 9. At each site the Gates-MacGinitie Reading Tests were administered between 9:00 and 10:30 A.M. and the Wisconsin Design Tests of Reading Skill and Development subtests between 1:00 and 2:30 P.M. of the same day. The order of the Gates-MacGinitie subtests was unchanged. However, the testing sequence of the four criterion-referenced subtests was randomly ordered for each class.

Table 9

Testing Procedures Followed by

Participating Teachers

Procedure	Time	Sequence
Pass out Materials	5 minutes	9:00 - 9:05
Read Directions	10 minutes	9:05 - 9:15
Vocabulary Test	15 minutes	9:15 - 9:30
Break	10 minutes	9:30 - 9:40
Read Directions	10 minutes	9:40 - 9:50
Comprehension Test	25 minutes	9:50 - 10:20
Collect Materials	5 minutes	10:15 - 10:20
Time Sequence for		
Wisconsin Design		
Pass out Materials	5 minutes	1:00 - 1:05
Directions to first test	5 minutes	1:05 - 1:10
Test	15 minutes	1:10 - 1:25
Directions to second test	5 minutes	1:25 - 1:30
Test	15 minutes	1:30 - 1:45
Break	10 minutes	1:45 - 1:55

Table 9 (continued)

Procedure	Time	Sequence
Directions to third test	5 minutes	1:55 - 2:00
Test	15 minutes	2:00 - 2:15
Directions to fourth test	5 minutes	2:15 - 2:20
Test	15 minutes	2:20 - 2:35
Collect Materials	5 minutes	2:35 - 2:40

The achievement testing was performed on three consecutive days, one district testing on Monday, two on Tuesday and the fourth on Wednesday of the same week.

5. Following the large group testing, 110 of the Gates-MacGinitie test booklets were randomly selected and hand scored as a means of identifying good, deficit, and difference readers. Eighteen booklets were discarded when it was discovered that they lacked proper identification information. Furthermore, the Caroni test results were discarded from the sampling pool when the investigator failed to secure transportation to that district. As a result, 77 subjects from two good and three poor classrooms across three districts comprised the sampling pool for the selection of good, deficit, and difference readers (see Table 10).

6. Next, 33 subjects were randomly selected to participate in the oral reading component of the study. Of these, twenty-three--six good, eight deficit, and nine difference readers--were tested. The remaining subjects were either absent, or unable to read the test passages. The final sample was further reduced when it was discovered that four of the tapings were inaudible. Consequently, the investigator analyzed five performances from each cell to keep the sample size equal (see Table 11).

Procedurally, each subject was asked to read a passage one grade level above his/her vocabulary subtest grade equivalent score. The passage was changed when too few or too many errors were made in the first 100 words.

Table 10

Summary Frequency Distribution of Good,

Deficit and Difference Readers by District

District	Good	Deficit	Difference	Not used
Port of Spain	3	18	3	5
St. Georges	3	25	6	2
North Eastern	6	11	1	1
Caroni	2	16	1	7
Total	14	70	11	15

Table 11

Participating Subjects by Ability, Standard Scores, and Story Read

Subject	Ability	Standard Scores		Story Read
		Vocabulary	Comprehension	
01	Good	56	49	First Kill
02		48	47	First Kill
03		56	50	First Kill
04		56	53	First Kill
05		61	64	First Kill
06	Deficit	42	42	Zoo Doctor
07		41	43	Space Pet
08		39	39	Space Pet
09		33	31	The Old Man, His Son, and His Donkey
10		32	30	War on Small Deer

Table 11 (continued)

Subject	Ability	Standard Scores		Story Read
		Vocabulary	Comprehension	
11	Difference	55	35	Why the Parrot Repeats Man's Words
12		48	31	Zoo Doctor
13		51	38	Why the Parrot Repeats Man's Words
14		43	35	Why the Parrot Repeats Man's Words
15		51	44	Why the Parrot Repeats Man's Words

Prior to each taping session, the investigator spent several minutes getting acquainted with each child. Questions were asked such as names of family members, favorite pastimes and books read. Then the child was asked to read one passage aloud and was told that his performance would be taped. In addition, subjects were informed that no help would be given in identifying unknown words. And finally, each pupil was instructed to read the passage in order to tell the investigator what s/he had just read. The retelling was accomplished by procedures specified in the RMI (Goodman & Burke, 1972, pp. 25-26). Following each selection, subjects were asked to retell the story in their own words. The investigator then aided the retelling by asking for additional information such as "Describe . . ." He also aided plot and theme identification by asking, "What was the problem in the story?" and "What's the story teaching us?" At no time did he interrupt or interject leading questions during the student's initial response.

Analysis

Two statistical programs were used to descriptively examine the large group results from the Gates-MacGinitie Reading Tests and from the four subtests of the Wisconsin Tests of Reading Skill Development. Unistat 2[6] was used to provide descriptive statistics for mean raw

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[6]Unistat 2: Univariate Descriptive Statistics and Histograms. Academic Computing Center, University of Wisconsin 1976.

scores. DISTX (Spuck, Stofflet, Fleckenstein, 1971) was used to compute an inter-correlation matrix of coefficients with exact probabilities for the dependent measures. Because there were missing data for several of the variables each analysis was programmed to edit blank spaces and average those remaining. Thus, N's and standard deviations for certain analyses differed slightly from other values computed using all the data.

To test the hypotheses, statistically significant differences between group mean and percentage scores were determined by two sample t tests using the SPSS statistical program (Nie, Hull, Jenkins, Sternbrenner & Dent, 1975). The decision to use a parametric test was based on the assumption that the probability statements resulting from the t test would be highly accurate even if variances between groups differed widely (Boneau, 1953). Accordingly, separate variances rather than pooled variances were used to detect significant differences between the scores. Due to the exploratory nature of the study, probability levels at or below .10 were accepted as significant.

CHAPTER III

RESULTS AND DISCUSSION

The purpose of this chapter is to describe and analyze the silent and oral reading performance of selected subjects in Trinidad and Tobago. The overall results of the norm- and criterion-based tests are discussed in the first section of the chapter, "Overall Reading Ability." Descriptive aspects of the obtained scores as well as relational trends in the data are pointed out. The second section of this chapter, "Statistical Tests of Significance," deals with a psycholinguistic analysis of miscues generated by good, deficit, and difference readers. Here, group mean percentage scores on selected measures are discussed in terms of differences between the scores and the significance of the differences.

Overall Reading Ability

Gates MacGinitie Reading Test-Vocabulary

The mean score obtained by all subjects on the Vocabulary subtest of the Gates MacGinitie Reading Test was 22.49. The range of the scores was 31 (low = 10, high = 41). Differences between the mean scores across the four districts were minimal (see Table 12).

According to the norms provided in the Gates MacGinitie Reading Test Teacher's Manual, Survey D (Gates & MacGinitie, 1965) the observed mean raw score on the Vocabulary subtest was equivalent to a grade score of 4.1. Since the subjects in this study were on the

Table 12

Summary Statistics: Gates-MacGinitie Vocabulary and Comprehension Subtests by District and by Ability (N = 110)

Subtest/ District	N	Mean	Range	Standard Deviation
VOCABULARY				
Port of Spain	29	22.51	11-35 (24)	6.63
St. Georges	37	22.24	11-34 (23)	5.76
Northeastern	18	22.83	10-41 (31)	11.11
Caroni	26	22.57	11-33 (22)	5.24
COMPREHENSION				
Port of Spain	29	22.75	2-36 (34)	8.27
St. Georges	37	21.05	9-38 (29)	6.74
Northeastern	18	22.16	3-47 (44)	12.96
Caroni	26	21.57	10-38 (28)	7.59
VOCABULARY				
Good	60	25.18	11-41 (30)	6.64
Poor	50	19.26	10-33 (23)	5.81

Table 12 (continued)

Subtest/ District	N	Mean	Range	Standard Deviation
COMPREHENSION				
Good	60	25.61	9-47 (38)	8.02
Poor	50	17.24	2-30 (28)	6.67

fifth grade level their expected grade level was 5.5. Hence, the observed grade equivalent score across the districts averaged one year and four months below expected grade level.

Table 12 also presents the mean raw scores, ranges, and standard deviations on the Vocabulary subtest for good and poor readers. The grade equivalent score for the good readers was 4.5 or one year below expected grade level. The poor readers' grade equivalent score was 3.7 or 1.8 years below expected grade level. Fifty percent of the poor readers' equivalent scores were more than two years below expected grade level.

Gates MacGinitie Reading Test, Comprehension

The mean score obtained by all subjects on the Comprehension subtest of the Gates MacGinitie Reading Test was 21.80. The range of the scores was 45 (low = 2, high = 47). Similar to the Vocabulary subtest findings percentage score differences across the districts were minimal (see Table 12). However, an examination of the range of raw scores indicates that a wider disparity of scores resulted in the two districts where testing sites were not representatively chosen. The grade equivalent score for the observed raw score mean was 3.3 or 2.2 years below expected grade level. Clearly then, the subjects did considerably poorer on the Comprehension subtest than the Vocabulary subtest.

The mean raw scores, ranges and standard deviations on the Comprehension subtest for good and poor readers are presented in Table 12. Good readers averaged about a year and one half below

expected grade level (3.9). In comparison, the poor readers obtained a grade equivalent average score of 2.8, more than two and one half years below expected grade level.

WTRSD - Beginning Consonant Sounds

The mean raw score obtained by all the sujects on the Beginning Consonant Test was 16.84. The range of scores for all subjects was 15 (low = 5, high = 20). Table 13 shows that the mean raw scores were generally the same across all districts. Seventy-seven percent of the subjects attained mastery level (scored at least 80% correct) on this test. Of these, 31% received perfect scores or only missed one item.

The mean raw scores, standard deviations, and percent of masters for good and poor readers are presented in Table 14. Surprisingly the poor readers surpassed the good readers in the number of students who attained mastery levels. An examination of the sample size, however, indicates that 37% more good readers than poor readers took the test. Since identification of the good and poor readers depended on teacher judgment, discrepancies in performance were more likely to occur within the larger sample.

WTRSD - Variant Consonant Sounds

Subjects obtained a mean raw score of 15.20 on the Variant Consonants Test. Low and high scores on this measure were five and twenty-four (range = 19). The results across the districts were

Table 13

Summary Statistics: WTRSD Subtest

Results by District (N = 110)

Word Analysis Skills/District	N	Mean	Standard Deviation	% Mastering
BEGINNING CONSONANT SOUNDS				
Port of Spain	29	17.72	2.35	83
St. Georges	37	16.32	2.99	76
Northeastern	18	17.00	2.35	78
Caroni	14	16.21	4.15	71
VARIANT CONSONANT SOUNDS				
Port of Spain	29	15.89	2.51	7
St. Georges	37	14.24	3.46	8
Northeastern	18	15.05	.345	11
Caroni	26	15.88	4.20	19
LONG VOWEL SOUNDS				
Port of Spain	29	22.65	3.51	58
St. Georges	37	22.35	5.22	51

Table 13 (continued)

Word Analysis Skills/District	N	Mean	Standard Deviation	% Mastering
Northeastern	18	23.16	4.70	61
Caroni	14	23.14	4.45	50
BASE WORDS AND ENDINGS				
Port of Spain	29	10.34	1.87	69
St. Georges	37	8.56	2.88	46
Northeastern	18	9.83	2.66	61
Caroni	26	9.34	2.24	54

nearly the same (see Table 13). Surprisingly, only 11% of the subjects attained mastery level on the test. This is in sharp contrast to the results on the other WTRSD tests. Figure 3 illustrates the striking differences of mastery levels attained by good and poor readers in this study.

The results in Table 14 show that relatively few good readers did well on this test. Similarly, only two poor readers were able to attain mastery levels. Presumably, then, identification of variant consonant sounds proved to be both the good and poor readers' most difficult task in this study.

WTRSD - Long Vowel Sounds

The range of scores obtained on the test of Long Vowel Test was 20 (low = 5, high = 25). The raw score mean was 22.70. Means across districts varied less than one raw score point (see Table 13). Fifty-three percent of the subjects across the districts attained mastery of this skill. The good readers attained raw score was more than three points higher than the poor readers (see Table 14). Correspondingly 44% more of the good readers attained mastery on this test than the poor readers.

WTRSD - Base Words and Endings

The raw score mean for the Base Words and Endings Test across all districts was 9.42. The range of the scores was 10 (low = 2,

high = 12). Means across the district were minimal (see Table 13). Fifty-six percent of the subjects taking the test attained mastery. Of these 25% attained perfect scores. The good readers' obtained mean score was slightly higher than the poor readers' mean score (see Table 14). Correspondingly 12% more good readers than poor readers (62% vs. 50%) attained mastery.

Comparing Gates-MacGinitie Reading Test Results

In order to determine whether differences in subtest scores were significant a comparison between Vocabulary and Comprehension standard scores was made according to the procedures outlined in the Technical Manual for the Gates-MacGinitie Reading Test (Gates & MacGinitie, 1972). Accordingly, the first step was to identify the critical values for the mean standard score of the Comprehension subtest using the following equation

$$C = .99\ V + 0.6 \pm \frac{7.4}{\sqrt{N}}$$

where V equals the mean standard score on the Vocabulary subtest and N equals the number of subjects. In the study, the values for V and N were 42.29 and 110 respectively. Hence, the critical values ($\pm$) were 41.86 and 43.26 respectively. The next step was to compare the observed standard score for Comprehension with those values. If the Comprehension standard score mean fell within these limits the performance would be judged compatible with the reading Vocabulary score.

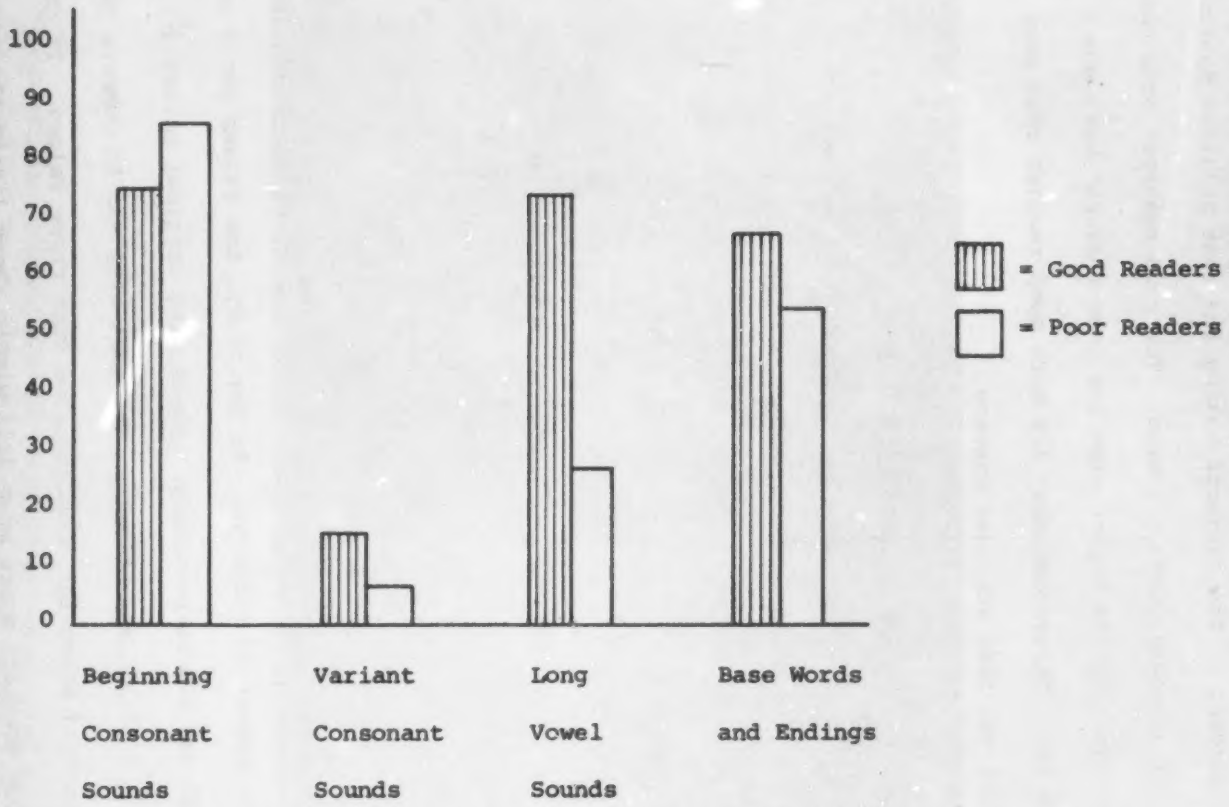

Figure 3. The Percent of Good and Poor Readers Attaining Mastery on the WTRSD Subtest Scores.

Table 14

Summary of Statistics: WTRSD Subtest

Results by Ability

Word Analysis Skill/Ability	N	Mean	Standard Deviation	% Mastery
BEGINNING CONSONANT SOUNDS				
Good	60	16.56	3.29	79
Poor	38	17.28	2.21	84
VARIANT CONSONANT SOUNDS				
Good	60	15.66	.399	13
Poor	50	14.64	2.64	4
LONG VOWEL SOUNDS				
Good	60	24.31	3.45	70
Poor	38	20.15	4.85	26

Table 14 (continued)

Word Analysis Skill/Ability	N	Mean	Standard Deviation	% Mastery
BASE WORDS				
ENDINGS				
Good	60	9.56	2.58	62
Poor	50	9.26	2.48	50

On the other hand, if the score was lower than the computed limits the group would not have scored as well as expected from the Vocabulary subtests. Since the Comprehension standard score was 38.13 this value fell outside these limits. Thus, subjects across the four districts did not perform as well on the Comprehension test as expected from their results on the Vocabulary subtest.

The performance of the good and poor readers were compared in the same way. Good readers obtained a Vocabulary standard score mean of 45.46 (N = 60). Consequently, critical values of 44.65 and 46.55 were computed. Since the mean standard score for good readers was 45.96, they did as well as expected from the Vocabulary score. Conversely, the poor readers' critical values for the Comprehension standard score were found to be 38.58 and 38.91 (V = 38.7, N = 50). Since the observed Comprehension standard score was 34.8 they did significantly poorer on the Comprehension subtest than was expected from their results on the Vocabulary subtest.

Correlational Patterns

The correlations between the Vocabulary and Comprehension subtests on the Gates-MacGinitie Reading Test for all subjects was moderately high (.71) and statistically significant at the .001 level. The correlations between the subtests was slightly higher (.63, $p < .001$) for the good readers than for the poor readers (.59, $p < .001$). A correlational matrix of the Vocabulary and Comprehension subtests with the WTRSD tests for good, poor, and all

readers is presented in Table 15. The results indicate that the good readers maintained higher, more positive correlations between the measures than the poor readers. Apparently, the good readers were able to integrate the skills underlying these measures more consistently than the poor readers.

Discussion

The results from the norm- and criterion-based tests seem to support the conclusions of Carrington (1972, p. 15) and others that Trinidadian pupils at the end of primary school are deficient in basic communication skills. In this study, overall reading ability was two years below expected grade level. Moreover, mastery levels on the four criterion-based measures of phonic skills averaged only 48%.

For a number of reasons, the data lead to speculation regarding manifestations of dialect biases in the test instruments. For example, an examination of the Gates-MacGinitie Reading Test scores reveals that good readers comprehended about as well as expected given their below grade level scores on the Vocabulary subtest. Apparently, they experienced difficulties with vocabulary items that affected their performance on both subtests. Of course their low vocabulary scores may have been due to word analysis deficiencies as manifested by their performance on the WTRSD tests. At the same time, phonic skills cannot produce recognizable words if they are not

Table 15

Correlation Matrix of Gates-MacGinitie Vocabulary and Comprehension Subtest Scores with Selected WTRSD Subtest Scores for Good, Poor, and All Readers

Subtest*	#1	#2	#3	#4	#5
#1					
Good					
Poor					
All					
#2					
Good	.63				
Poor	.59				
All	.71				
#3					
Good	.53	.39			
Poor	.23	.23			
All	.37	.28			
#4					
Good	.38	.29	.29		
Poor	-.02	.17	.11		
All	.32	.37	.23		
#5					
Good	.51	.32	.29	.54	
Poor	.01	-.17	.22	.17	
All	.40	.28	.23	.42	
#6					
Good	.31	.16	.54	.29	.43
Poor	.00	.09	.26	.41	.51
All	.24	.27	.35	.41	.53

*Subtest 1 = Vocabulary
Subtest 2 = Comprehension
Subtest 3 = Beginning Consonant Sounds
Subtest 4 = Variant Consonant Sounds
Subtest 5 = Long Vowel Sounds
Subtest 6 = Base Words and Endings

auditorily familiar to the reader (Smith & Johnson, 1976). Thus, pupils who lack a knowledge of word meanings will have difficulty with comprehension tasks. Spache (1976, p. 231) supports this hypothesis by pointing out that low Vocabulary and Comprehension scores on a norm-based test are indicative of the readers "lack of breadth of word meanings that affect both results."

While the investigator did not interview subjects to determine the nature of their Vocabulary subtest errors it is true that cultural aspects of Trinidadian vernacular--e.g., different words, word meanings and idioms--may have been responsible for the low Vocabulary scores. Trinidadian vernacular shares nearly the same lexicon i.e., vocabulary, with standard English, yet important differences exist especially at the creole end of the linguistic continuum. For one thing, vernacular speakers utilize a stock of old French or patois words, e.g., picong, fete, that are not found in the standard English lexicon. Moreover, different meanings are frequently assigned to words. Pan, for instance, refers to a musical instrument that is made from steel drums. Another characteristic of the vernacular is the use of phrases and idioms that convey their own distinct meaning. For example, "giving someone a rake" as in "Lie me gie you a rake" denotes story telling, not the exchange of a garden instrument (Ottley 1971, p. 22).

Clearly, then, vernacular speakers use a wide variety of locally referenced words and phrases that differ from standard English vocabulary. Thus, a norm- based Vocabulary test like the Gates-MacGinitie Reading Test may consist of word meanings that are unfamiliar to vernacular speakers.

Presumably, pupils overcome this problem by acquiring alternative meanings through media contacts e.g., radio, T.V. movies, as well as classroom exposure to standard English forms. However, Carrington (1972, pp. 4-55) found little evidence to suggest that Trinidadian schools provide sound programs of reading vocabulary development that incorporate direct and vicarious learning experiences, systematic instruction or wide range of reading opportunities. To the contrary, he reported that classrooms are typically "drab" with little in the way of audiovisual aides, illustrations or play things. Instructionally, he observed that vocabulary lessons are nothing more than copying/memorization exercises. He also noted that few if any schools have class libraries; those that do contain few books that are interesting or relevant. Overall then, it's likely that pupils in this study were unprepared to deal with the variety of standard English word meanings used in the Gates-MacGinitie Reading Tests.

In contrast, the poor readers' difficulties with the vocabulary items were undoubtedly compounded by their paucity of word analysis skills as evidenced by the WTRSD subtest results. Support for this hypothesis is also evident in the magnitude of squared correlations

between the Vocabulary subtest and the combined WTRSD test scores. Whereas the good readers square of the correlation ($.60^2 = .36$) accounts for more than one third of the variation in the two distributions, the poor readers squared correlation ($-.13 = .01$) amounted to nearly zero percent of variation. Here the implication seems to be that aside from word meaning difficulties, the poor readers experienced fundamental problems at the word recognition level.

The results on the criterion-based phonic tests warrant a final discussion. Striking differences in acquisition patterns were evident on two of the four tests. Whereas both groups of readers did poorly on the Variant Consonant Test, large differences in mastery levels were attained on the Long Vowel Test, with the good readers showing the most ability.

Two factors may be related to these findings. Experimental results have confirmed that long and short vowel correspondences are learned more rapidly than variant consonant patterns (Venezky, Chapman, & Calfee, 1972; Venezky & Johnson, 1972). This is attributed to more occurrences of real word vowel "exemplars" in popularly used reading materials. Hence, acquisition of vowel generalizations occurs as readers encounter "exemplars" in print. It is not surprising then that the good readers did better on the Long Vowel Test than on the Variant Consonant Test. It's also likely that they did better than the poor readers on the Long Vowel Test because they read more often.

For a number of reasons, however, it is difficult to understand why Trinidadian pupils did not do as well as other students across cultures. For example, there was an 11% difference in the mean percentage score between the good readers in this study and fourth grade American and Canadian children (Johnson, 1973, p. 77) on the Long Vowel Test. Similarly, the American and Canadian students obtained considerably higher mean percentage scores than the Trinidadian good readers on the Varient Consonant Test (Trinidad = 65%, U.S.A. = 80%, Canada = 87%).

In part, the disparity of these scores may be accounted for in terms of the design and content of the testing instruments. The Long Vowel Test measured two skills--the reader's ability to name a vowel heard in a synthetic word and his/her ability to determine whether its sound was long or short. Representative pupil responses showed that subjects had little trouble with the first task on the Long Vowel Test i.e., vowel naming. However, good and poor readers found it considerably more difficult to decide whether the vowels heard in synthetic words were long or short. This is not surprising since Trinidadian vernacular speakers do not diphthongize long vowels[7]; that is, tense or long vowels are not produced by moving the tongue and jaw forward and upward as standard English speakers do. As a result,

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[7]See Footnote 2.